DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024122

Address: 333 Burma Road **Date Inspected:** 27-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China

CWI Name: Shi Yu **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC perform FCAW welding on lifting lug and grinding work on the hand rail and lifting lug,

Bay 7

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; Bike Path on item number 1 of NWIT tracker document # 09275.

Bay 8

This QA Inspector observed the following work in progress for Bay 8.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Huang Min.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: U-Rib splice channel

(Continued Page 2 of 5)

PCMK: SA2310-1-2 Welder: 054459

WPS-B-P-2231-TC-U4b-FCM-1

Bay 9

This QA Inspector observed the following work in progress for Bay 9.

ZPMC perform fit up and grind work on Traveler rail and U-Rib splice channel.

Bay 11

This QA Inspector observed the following work in progress for Bay 11.

ZPMC perform fit up and grind work on bike path BK011A.

Bay 14

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as An Gian Xing.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Traveler Rail

PCMK: TR3007TR1 Welder: 037779 Report: BWR-21117

WPS-345-SMAW-2G (2F)-repair-1

Components: Sub Assembly PCMK: X4025C-001-001

Welder: 045268 Report: BWR-21117

WPS-345-SMAW-3G (3F)-repair-1

Heat straightening of PCMK, TR3008TR2, TR3021TR1, under approved Heat Straightening procedure, HSR 1 (B)-10279, 10279 The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as An Gian Xing. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm.

Bay 16

This QA Inspector observed the following work in progress for Bay 16.

ZPMC perform SMAW VT repair welding and grind work on hand rails.

Bay 19

This QA Inspector observed the following work in progress for Bay 19.

ZPMC perform FCAW welding on lifting lug and grinding work on the BK24A3,

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Trial Assembly Yard

This QA Inspector observed the following work in progress for Trial Assembly yard.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhang Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: 13AW

PCMK: FB3193-001-149, 156

Welder: 201861

WPS-B-P-2113-FCM-1

Components: 13AW PCMK: DP3120-001-011

Welder: 066674 Report: BWR20560

WPS-345-SMAW-3G (3F)-FCM-Repair-1

Components: 13CW

PCMK: SEG3020AW-086,

Welder: 070008

WPS-B-P-2114-FCM-1

Components: 13CW PCMK: OBW13-001 Welder: 201861 Report: BWR 21111

WPS-345-SMAW-4G (4F)-FCM-Repair-1

Components: 13BE

PCMK: SEG3009D-066,072

Welder: 052696 Report: BWR 21111

WPS-345-SMAW-3G (3F)-FCM-Repair-1

Components: 13BE PCMK: AH3512A-008

Welder: 051354

WPS-B-P-2212-B-U2-FCM-1

Components: 13B/C

PCMK: OBE13AA-003,004

Welder: 067866

(Continued Page 4 of 5)

WPS-B-P-2114-FCM-1

Components: 14E

PCMK: SEG3019AJ-069,080

Welder: 215553 Report: BWR 21606

WPS-345-SMAW-3G (3F)-FCM-Repair-1

Components: 14E

PCMK: SEG3019AL-004,295 Welder: 067611, 216086

WPS-B-P-2212-TC-U4b-FCM-1

Components: 14E

PCMK: SEG3019G-089

Welder: 058087

WPS-B-P-2214-TC-U45-FCM-1

This QA Inspector observed the following work in progress for Trial Assembly Yard.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhang Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: 13AW

PCMK: SEG3013AP-27, 28

Welder: 048433

WPS-B-T-2132-ESAB

Components: 14E

PCMK: SEG3019AV-055

Welder: 068494 Report: BWR 21066

WPS-345-SMAW-2G (2F)-FCM-ESAB-Repair-1

Components: 13BE

PCMK: SEG3007F-067,071

Welder: 055491

WPS-B-T-2231-ESAB

Components: 13BE

PCMK: SA3037-007,008

Welder: 050977

WPS-B-T-2231-ESAB



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This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; OBG 14E on item number 1 of NWIT tracker document # 09277,

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or 15000422372, who represents the Office of Structural Materials for remedial efforts please contact Eric Tsang your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer